

COMPUTERS/HILLEL SEGAL

Programs unscramble 'RAM-cram'

"RAM-cram" is a ridiculous name for a problem that's far from ridiculous for many users of IBM PCs and PC-compatible computers.

It occurs when too many memory-resident programs are stuffed into the computer's memory, and the programs begin to conflict with one another. The symptoms are:

- ✓ Tasks that stop running dead in the middle.

- ✓ Keyboards that freeze up in mid-sentence.

- ✓ Commands that don't operate properly.

Here's why RAM-cram occurs: Your personal computer typically has 256 kilobytes, 512K or 640K of random access memory, or RAM, available for your programs to use. But your word processing program, accounting program or whatever else you're running doesn't need the full amount, leaving some left over.

A few years ago, some bright programmers figured out a way to put other programs in that extra memory — called RAM-resident or memory-resident programs — that could "pop up" right in the middle of your main programs by striking a predefined "hot key" combination.

This was a breakthrough, and dozens of RAM-resident spell-checkers, note pads, calendars and other types of programs were released to take advantage of the new technique.

When just one RAM-resident program was installed, the only potential conflict was with the regular application program being run. If a program used the F5 function key for one thing and the RAM-resident program used the same key for something else, you had to redefine the RAM-resident's key definition to solve the problem. It was easy.

The trouble begins, however,

when more than one RAM-resident program is installed. Each program naturally assumes that it's the only one installed! The result is often chaos.

What can you do?

- ✓ The first solution is the simplest, cheapest, and requires the least technical knowledge: don't install more than one RAM-resident program. Or, if you do, try reversing their order of installation if any of the unpleasant symptoms are encountered. If you continue to encounter problems while both are installed, simply choose one or the other to run at a time.

- ✓ Up until its price was raised, the second solution was PopDrop, a neat, \$19.95 program from InfoStructures Inc. of Tucson, Ariz. PopDrop has simple commands that allow you to "peel away" layers of offending RAM-resident programs, one at a time, without rebooting your computer. This is handy because it avoids interruptions of your daily work from having to reboot due to program conflicts. PopDrop's just-released

version 3 costs \$54.95.

- ✓ The third solution is Referee, \$69.95 from Persoft of Madison, Wis. Similar to PopDrop, it provides the ultimate in flexibility. You can either remove RAM-resident programs or merely suspend them. You even can set it up so that only certain RAM-resident programs are run with certain application programs.

The bottom line: For 90 percent of all users, the first solution is probably the best. Both PopDrop and Referee will take some advanced skills to install and use correctly, and this opens the door for expensive mistakes and wasted management time. But RAM-resident programs are too good and too helpful not to use, so don't give up if you encounter problems trying to install one.

Hillel Segal is an independent computer consultant and author of the monthly Executive Computing Newsletter, published by the Association of Computer Users, P.O. Box 9003, Boulder 80301.



Segal